

LISTING OF THE CLAIMS

A complete listing of the claims is provided below. This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A slip joint adaptor comprising:  
~~a housing having a substantially hexagonal outer cross section;~~  
a first chamber contained within the housing and configured to allow a pipe to slide through it;  
a second chamber contained within the housing and configured to allow an end of a pipe to slide through it and to provide a bridge for material flowing from the pipe to a second pipe when an end of the pipe does not contact an end of the second pipe; and  
a third chamber contained within the housing and configured to attach to an end of a second pipe.
2. (Original) The slip joint adaptor of claim 1, wherein the first, second and third chambers are substantially coaxial.
3. (Canceled)
4. (Original) The slip joint adaptor of claim 1, wherein the third chamber has threads for attaching to an end of a second pipe.
5. (Original) The slip joint adaptor of claim 1, further comprising at least one annular groove in the first chamber configured to house an O ring gasket.

6. (Original) The slip joint adaptor of claim 5, further comprising:

a pipe extending through the first chamber in a slidable fashion and having an end in the second chamber; and

an O ring gasket in the at least one groove the O ring gasket having an inner diameter less than an outer diameter of the pipe, and the O ring gasket having an outer diameter greater than the diameter of the groove.

7. (Original) The slip joint adaptor of claim 1, further comprising a tapered portion located between the first and second chambers.

8. (Original) The slip joint adaptor of claim 1, further comprising a pipe extending through the first chamber in a slidable fashion and terminating with a flared end in the second portion, the flared portion having a diameter sufficient to prevent the pipe end from sliding through the first chamber.

9. (Original) The slip joint adaptor of claim 1, further comprising:

a pipe extending through the first chamber in a slidable fashion and having an end in the second chamber; and

a shoulder having a diameter greater than a diameter associated with the first chamber, the shoulder mounted on a portion of the pipe located outside the housing and located on the pipe to but against the housing and prevent the end of the pipe from extending into the third chamber.

10. (Previously Presented) The slip joint adaptor of claim 1, further comprising:

a pipe extending through the first chamber in a slidable fashion and having an end in the second chamber; and

a seal located between the pipe and the housing substantially sealing the second chamber from the outside of the housing via the first chamber.

11. (Currently Amended) A slip joint adaptor comprising:

means for housing a pipe configured to allow an end of a first pipe to slide through it ~~the means for housing having a substantially hexagonal outer cross section;~~  
means for limiting sliding motion of the first pipe so that the first pipe does not slide out of the housing means;  
means for attaching to an end of a second pipe; and  
means for bridging fluid flowing from the pipe to the second pipe when an end of the pipe does not contact an end of the second pipe.

12. (Cancelled).

13. (Original) The slip joint adaptor of claim 11, attaching means has threads for attaching to an end of a second pipe.

14. (Original) The slip joint adaptor of claim 11, further comprising at least one seal containing means in the means for housing.

15. (Original) The slip joint adaptor of claim 11, further comprising a pipe extending through the housing means in a slid able fashion and terminating with a flared end configured to prevent the flared end from sliding out of the housing means.

16. (Original) The slip joint adaptor of claim 11, further comprising:  
a pipe extending through the housing means; and

a stop located on the pipe and located on the pipe to prevent the end of the pipe from extending into the housing means farther than a predetermined distance.

17. (Previously Presented) The slip joint adaptor of claim 11, further comprising:

a pipe extending through the housing means; and

means for sealing the pipe into the means for housing.

18. (Previously Presented) A method of attaching two pipe ends comprising:

sliding a first pipe through a slip joint adapter;

positioning the slip joint adapter to the desired location on the first pipe;

providing a stop on the first pipe that blocks the first pipe from sliding into the slip joint adapter farther than a predetermined distance;

attaching the slip joint adapter to an end of a second pipe; and

bridging material carried by the pipe with the slip joint adapter between two non-contacting pipe ends.

19. (Original) The method of claim 18, further comprising sealing the first pipe with the slip joint adapter.

20. (Original) The method of claim 18, further comprising flaring the end of the first pipe.

21. (New) The slip joint adaptor of claim 1, wherein the housing has a substantially hexagonal outer cross-section.

22. (New) The slip joint adaptor of claim 1, wherein the end of the pipe does not contact the end of the second pipe.

23. (New) The slip joint adaptor of claim 1, wherein the first and second chambers are configured to allow the pipe to slide in an axial direction relative to the housing while maintaining a bridge for material flowing from the pipe to the second pipe.

24. (New) The slip joint adaptor of claim 1, wherein the first and second chambers are configured to allow the pipe to slide in an axial direction relative to the housing in order to facilitate connection of the pipe to the second pipe when the end of the pipe is located at various lengths from the end of the second pipe.